

CLAIMS

What is claimed is:

1. A method for securely confirming performance of task by a peer in a peer in a peer-to-peer network, comprising:

5 broadcasting a request over the network by a requesting peer for a task with respect to a remote non-local backend server;

 receiving a response to the request containing a local alias URL, the local alias URL pointing to a destination on a responding server node;

10 forwarding the task to the local alias URL for performance of the task by the responding server node; and

 verifying a digital signature of any receipt packet received from the responding server node to ensure that the receipt packet is from the remote non-local backend server.

15 2. A method for securely confirming performance of task by a peer of claim 1, further comprising placing the server node in a black list of the requesting peer if said verifying is unsuccessful.

20 3. A method for securely confirming performance of task by a peer of claim 1, further comprising awaiting a maximum upload receipt time period for receiving the receipt packet.

4. A method for securely confirming performance of task by a peer of claim 3, further comprising placing the server node in a black list of the requesting peer if a receipt packet fails to arrive within said maximum upload receipt time period.

5 5. A method for securely confirming performance of task by a peer of claim 3, wherein the maximum upload receipt time period is determined based upon at least one of size of task being performed, transmission speed, and frequency of which the responding server node performs the task.

10 6. A method for securely confirming performance of task by a peer of claim 1, wherein the digitally signed response is signed by a 1024-bit VeriSign digital certificate.

15 7. A method for securely confirming performance of task by a peer of claim 1, further comprising broadcasting a message indicating that the requesting peer has located the responding server node.

20 8. A method for securely confirming performance of task by a peer of claim 1, wherein the task is an uploading task and wherein said forwarding the task to the local alias URL includes forwarding a file to be uploaded to the remote non-local backend server.

9. A computer program product for securely confirming performance of task by a peer in a peer-to-peer network, comprising:

computer code of a requesting peer that broadcasts a request over the network for a task with respect to a remote non-local backend server;

5 computer code that receives a response to the request, the response containing a local alias URL, the local alias URL pointing to a destination on a responding server node;

computer code that forwards the task to the local alias URL for performance of the task by the responding server node; and

10 computer code that verifies a digital signature of any receipt packet received from the responding server node to ensure that the receipt packet is from the remote non-local backend server; and

a computer readable medium that stores said computer codes.

15 10. A computer program product for securely confirming performance of task by a peer of claim 9, further comprising computer code that places the server node in a black list of the requesting peer if said verifying is unsuccessful.

20 11. A computer program product for securely confirming performance of task by a peer of claim 9, further comprising computer code that awaits a maximum upload receipt time period for receiving the receipt packet.

12. A computer program product for securely confirming performance of task by a peer of claim 11, further comprising computer code that places the server node in a black list of the requesting peer if a receipt packet fails to arrive within said maximum upload receipt time period.

5

13. A computer program product for securely confirming performance of task by a peer of claim 11, wherein the maximum upload receipt time period is determined based upon at least one of size of task being performed, transmission speed, and frequency of which the responding server node performs the task.

10

14. A computer program product for securely confirming performance of task by a peer of claim 9, wherein the digitally signed response is signed by a 1024-bit VeriSign digital certificate.

15

15. A computer program product for securely confirming performance of task by a peer of claim 9, further comprising computer code that broadcasts a message indicating that the requesting peer has located the responding server node.

20 16. A computer program product for securely confirming performance of task by a peer of claim 9, wherein the task is an uploading task and wherein said forwarding the task to the local alias URL includes forwarding a file to be uploaded the remote non-local backend server.